AGS STUDIES REPORT

NUMBER	112
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Date .	7/12/78	Time	1200-1300	Experimenters	J.	Glenn
Subjec	ct Con	trolling	Beam Dumping			

OBSERVATIONS AND CONCLUSION

Results

The H20 backleg windings were reconfigured to provide a 1/2 λ inside bump centered at I13. The beam was turned off 360 ms (\sim 15 GeV/c) and the loss pattern noted. The bump turned on and raised to \sim 50A without changing the loss pattern. Raising the current another 20A moved 80-90% of the losses in the ring to the I13 region.

Conclusion

- 1) A small change (\sim 1/4 cm) change in the location of an inside aperture completely can rearrange the loss pattern relative to the closed orbit of protons in the ring.
- 2) Small, low power bumps could be used to direct beam loss to a low penalty areas as necessary.